

## Correspondence

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**N. Samin. A CHECKLIST OF THE IRANIAN CYBOCEPHALIDAE (COLEOPTERA: CUCUJOIDEA). – Far Eastern Entomologist. 2015. N 297: 16-20.**

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**Summary.** Published data on Iranian Cybocephalidae (Coleoptera) are summarized in this paper. Single genus *Cybocephalus* Erichson, 1844 with 12 species has been reported from Iran so far. *Cybocephalus mediterraneus* Endrödy-Younga, 1968 is newly recorded from Iran.

**Key words:** Coleoptera, Cucujoidea, Cybocephalidae, fauna, new record, Iran.

**Н. Самин. Список иранских Cybocephalidae (Coleoptera: Cucujoidea) // Дальневосточный энтомолог. 2015. N 297. C. 16-20.**

**Резюме.** Обобщены сведения по иранским Cybocephalidae (Coleoptera). К настоящему времени из Ирана отмечено 12 видов этого семейства, относящихся к роду *Cybocephalus* Erichson, 1844. Впервые для Ирана указывается *C mediterraneus* Endrödy-Younga, 1968.

Cybocephalidae (Coleoptera) are small beetles (1 mm in body length), and occur worldwide except in the Polar Regions (Smith & Cave, 2006a). Currently, eight extant genera (*Cybocephalus*, *Endrodiellus*, *Hierronius*, *Horadion*, *Pastillodes*, *Pastillus*, *Pycnocephalus*, *Taxicephomerus*) have been described, including ca 100 species (Jelínek *et al.*, 2010), and one fossil genus, i.e. *Pastilloenicus* (Kirejtshuk & Nel, 2008). Cybocephalids are known as active predators in both the larval and adult stages (Endrödy-Younga, 1968; Lupi, 2002). They often feed on several important pests of crops, including Aleyrodidae, Diaspididae, Pseudococcidae, and *Panonychus citri* (McGregor) (Acari: Tetranychidae) (Tian & Pang, 1994; Smith & Cave, 2006a; Smith & Bailey, 2007; Hisamatsu 2013). Also, members of the genus *Cybocephalus* are well-known armored scale feeders, but their effectiveness as biological control agents of pest armored scales has not been well studied (Smith & Cave, 2006a). Furthermore, there has been very little taxonomic work done on this group of beetles, especially in Iran and adjacent regions. The objective of the present study is cataloging all the data on Iranian Cybocephalidae.

The published data on the family Cybocephalidae (Coleoptera) in Iran are summarized. The catalogue comprises the following data: the valid taxa name, published records with provincial distribution, and synonyms in records. The system, nomenclature, synonymy, and distribution follow mainly Löbl & Smetana (2007).

The fauna of Iranian Cybocephalidae included only single genus *Cybocephalus* and totally 12 recorded species. The list of species is given below with distribution data.

### LIST OF IRANIAN CYBOCEPHALIDAE

#### Family Cybocephalidae Jacquelin du Val, 1858

##### Genus *Cybocephalus* Erichson, 1844

***Cybocephalus (Cybocephalus) aonidiellae* Kirejtshuk et Fallahzadeh, 2010**

DISTRIBUTION. Endemic to Iran: Fars (Kirejtshuk & Fallahzadeh, 2010).

NOTES. Predator of *Aonidiella orientalis* (Newstead, 1894) (Hemiptera: Diaspididae) on Citrus (Kirejtshuk & Fallahzadeh, 2010).

***Cybocephalus assiduus* Kirejtshuk et Fallahzadeh, 2008**

DISTRIBUTION. Endemic to Iran: Fars (Kirejtshuk & Fallahzadeh, 2008).

***Cybocephalus mediterraneus* Endrödy-Younga, 1968**

DISTRIBUTION. Iran: Guilan (Sakenin *et al.*, 2008). – Cyprus, Greece, Israel, Jordan, Lebanon, Saudi Arabia, Syria, Turkey.

***Cybocephalus fodori minor* Endrödy - Younga, 1968**

DISTRIBUTION. Iran: Isfahan (Kolahdooz Shahroodi, 2001, 2002; Kolahdooz Shahroodi *et al.*, 2012). – Israel, Jordan, Lebanon, Morocco, Saudi Arabia, Syria, Turkey.

NOTES. Predator of *Lepidosaphes conchiformis* Gemelin., *Lepidosaphes malicola* Borchsenius, and *Lepidosaphes pistaciae* (Hemiptera: Diaspididae) (Kolahdooz Shahroodi, 2002; Kolahdooz Shahroodi *et al.*, 2006, 2012).

***Cybocephalus mediterraneus* Endrödy-Younga, 1968**

MATERIAL EXAMINED. **Iran**: West Azarbaijan province, Ourmieh, 1378 m, 14.VII 2011, 1 ♂.

DISTRIBUTION. Iran (new record). – Greece (Crete), Cyprus, Israel, Jordan, Lebanon, Saudi Arabia and Syria.

***Cybocephalus membranaceus* Reitter, 1874**

*Cybocephalus syriacus* Reitter, 1878: 91.

DISTRIBUTION. Iran: Kerman (Yazdani & Ebrahimi, 1993; Modarres Awal, 1997 under *C. syriacus* Reitter). – Cyprus, Egypt, Lebanon, Syria.

***Cybocephalus mesopotamicus* Endrödy-Younga, 1968**

DISTRIBUTION. Iran: Fars, Khuzestan (Gharib, 1973; Modarres Awal, 1997). – Iraq, Jordan.

***Cybocephalus nigripes nigripes* J.R. Sahlberg, 1908**

*Dissia nigriceps* Grouvelle, 1913: 196.

DISTRIBUTION. Iran: Fars (Lachinani & Ahmadi, 1993; Modarres Awal, 1997 under *C. nigriceps* Grouvelle), Isfahan (Kolahdooz Shahroodi *et al.*, 2012). – Algeria, Egypt, Morocco.

***Cybocephalus palmarum* Peyerimhoff, 1931**

DISTRIBUTION. Iran: Fars, Isfahan, Khuzestan (Modarres Awal, 1997), Kerman (Yazdani & Ebrahimi, 1993). – Algeria, Egypt, Saudi Arabia.

***Cybocephalus planiceps* Endrödy-Younga, 1968**

DISTRIBUTION. Iran: Kermanshah (Jalilvand *et al.*, 2012, 2013). – France, Algeria (ssp. *platycephalus* Endrödy-Younga, 1968).

NOTES. Predator of *Diaspidiotus gigas* Thiem et Gerneck, *Melanaspis inopinata* Leonardi, and *Parlatoria oleae* Colvee (Hemiptera: Dispididae) (Jalilvand *et al.*, 2012, 2013).

***Cybocephalus rufifrons flaviceps* Reitter, 1874**

DISTRIBUTION. Iran: Fars, Khuzestan (Gharib, 1973; Modarres Awal, 1997). – Algeria, Egypt, Iraq, Morocco, Saudi Arabia, Tunisia, Turkey.

***Cybocephalus semiflavus* Champion, 1925**

DISTRIBUTION. Iran: Fars (Lachinani & Ahmadi, 1993; Modarres Awal, 1997). – India.

**DISCUSSION**

In total over than 140 species of *Cybocephalus* have been recorded all over the world (Tian & Pang, 1994) and of them up to now 12 species were recorded from Iran. Iran is a large country incorporating various geographical regions and climates, and we expect that a large number of species remain to be discovered. To find new species and distributional records, more studies should be conducted on this taxon in Iran. Also due to their predacious habits, cybocephalids have been studied for potential use in biological control studies as natural enemies (Smith & Cave, 2006a, b). So these beneficial insects can have effective role in biological control of agricultural pests in various agroecosystems.

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